Amendments To the Claims:

Please amend the claims as shown. Applicants reserve the right to pursue any cancelled claims at a later date.

1.-8. (cancelled)

9. (new) An automated method for generating program modules for controlling field devices, from a machine-readable parameterized description of field devices, wherein the description is used by a control unit for controlling the field devices, the method comprising:

providing control equipment for the field devices, wherein the control equipment comprises at least one microprocessor, at least one electronic storage, data input and output mechanisms for communicating with the control unit;

identifying the parameters of the field device, being in the description;

identifying characteristics of the parameters relevant for control purposes; and

generating program modules for the control equipment of the field device, which can be executed by the field device's microprocessor and which are based, at least partially, on the identified parameters and/or the characteristics of the parameters which have been identified as relevant for control purposes.

10. (new) A method in accordance with Claim 9, wherein the control equipment comprises at least one electronic storage data input and output means for communications with the control unit.

11. (new) A method in accordance with Claim 9, wherein the identifying characteristics of the parameters relevant for control purposes step comprises parameters regarding the data type, size, allowed values or allowed value range.

12. (new) A method in accordance with Claim 9, wherein for at least one parameter a declaration module is generated, which reserves for the parameter certain segments of the storage means and/or defines its data type and/or its size, where the storage segment reserved, the data

type and/or the size correspond to the identified characteristics of the parameter.

13. (new) A method in accordance with Claim 12, wherein for at least one parameter an access module is generated, which regulates accesses by the control equipment to the storage segment defined for the parameter in the declaration module.

14. (new) A method in accordance with Claim 9, wherein for at least one parameter a cross-referencing module is generated, which instructs the control equipment to execute other program modules when there is an access to the parameter.

15. (new) A method in accordance with Claim 9, wherein for at least one parameter an input checking module is also generated, which can be called up by the access module and which, when a parameter is changed, checks whether the new parameter value lies within the set of allowed values or within the allowed range, as applicable.

16. (new) A method in accordance with Claim 9, wherein an error message is generated if the parameter value supplied by the control unit does not lie within the set of allowed values or lies outside the permissible range, as applicable.

17. (new) A method in accordance with Claim 9, wherein for at least one parameter a naming module is also generated, which stores on the storage mechanism a name for the parameter, and makes it possible to access the parameter under this name.

18. (new) A method in accordance with Claim 12, wherein for at least one parameter an input checking module is also generated, which can be called up by the access module and which, when a parameter is changed, checks whether the new parameter value lies within the set of allowed values or within the allowed range, as applicable.

19. (new) A method in accordance with Claim 13, wherein for at least one parameter an input checking module is also generated, which can be called up by the access module and which,

when a parameter is changed, checks whether the new parameter value lies within the set of allowed values or within the allowed range, as applicable.

20. (new) A method in accordance with Claim 14, wherein for at least one parameter an input checking module is also generated, which can be called up by the access module and which, when a parameter is changed, checks whether the new parameter value lies within the set of allowed values or within the allowed range, as applicable.

21. (new) A method in accordance with Claim 12, wherein an error message is generated if the parameter value supplied by the control unit does not lie within the set of allowed values or lies outside the permissible range, as applicable.

22. (new) A method in accordance with Claim 13, wherein an error message is generated if the parameter value supplied by the control unit does not lie within the set of allowed values or lies outside the permissible range, as applicable.

23. (new) A method in accordance with Claim 12, wherein for at least one parameter a naming module is also generated, which stores on the storage mechanism a name for the parameter, and makes it possible to access the parameter under this name.

24. (new) A method in accordance with Claim 13, wherein for at least one parameter a naming module is also generated, which stores on the storage mechanism a name for the parameter, and makes it possible to access the parameter under this name.

25. (new) An automated method for generating, from a machine-readable description of field devices, program modules for controlling field devices, which are used on a control unit for the purpose of controlling the field devices, where each of the field devices incorporates control equipment with a microprocessor, with a storage mechanism and with data input and output mechanisms for communicating with the control unit, the method comprising:

identifying the parameters of the field device, comprised in the description;

for each of the parameters, identifying the characteristics relevant for control purposes; and

generating program modules for the control equipment of the field device, to be executed by the field device's microprocessor and which are based, at least partially, on the identified parameters and/or the characteristics of the parameters which have been identified as relevant for control purposes.

26. (new) A method in accordance with Claim 25, further comprising:

generating for at least one parameter a declaration module, which reserves for the parameter segments of the storage mechanism and/or defines its data type and/or its size, wherein the storage segment reserved, the data type and/or the size correspond to the identified characteristics of the parameter.

27. (new) A device for generating control modules for field devices, from a machine-readable parameterized description of the field devices, for use on control units for remote control of field devices, wherein each of the field devices has control equipment with at least one microprocessor, with at least one electronic storage means and with data input and output mechanisms for communicating with the control units, the device comprising:

input equipment for reading in and storing the description;

a first analysis mechanism for identifying the parameters of the field device being in the description;

a second analysis mechanism for identifying the characteristics of the parameters defined in the description as relevant for control purposes; and

a generation mechanism which, for at least one of the parameters identified in the first analysis facility, generates at least one program module, which can be executed on the field device's microprocessor.

28. (new) A device in accordance with Claim 27, wherein the generation mechanism generates:

a declaration module which, for the parameter concerned, defines certain segments of the storage means, its data type, its size and/or the set of allowed values or the allowed value range,

as applicable, and/or

an access module which, for the parameter concerned, controls accesses by the control equipment to the storage segment defined in the declaration module, and which can instruct the control equipment to execute other program modules when it accesses the parameter.